

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

AUG 7 2014

REPLY TO THE ATTENTION OF:

<u>CERTIFIED MAIL</u> RETURN RECEIPT REQUESTED

David Kozin
President
Imperial Zinc Corp.
1031 East 103rd Street
Chicago, Illinois 60628

Re: Finding of Violation

Imperial Zinc Corp. Chicago, Illinois

Dear Mr. Kozin:

The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violation (FOV) to Imperial Zinc Corp. (you) under Section 113(a) of the Clean Air Act, 42 U.S.C. § 7413(a). We find that you are violating the National Emission Standards for Hazardous Air Pollutants for Secondary Nonferrous Metals Processing Area Sources (Subpart TTTTTT) at your Chicago, Illinois facility.

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial, civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Alexandra Letuchy. You may call her at (312) 886-6035 to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

George T. Czerniak

Director

Air and Radiation Division

cc: Eric Jones

Compliance Unit Manager

Bureau of Air

Illinois Environmental Protection Agency

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:)
Imperial Zinc Corp.) FINDING OF VIOLATION
Chicago, Illinois)
) EPA-5-14-IL-21
Proceedings Pursuant to)
Section 113(a)(3) of the	.)
Clean Air Act, 42 U.S.C.)
§ 7413(a)(3))

FINDING OF VIOLATION

The U.S. Environmental Protection Agency is issuing this Finding of Violation (FOV) to Imperial Zinc Corp. (Imperial Zinc) under Section 113(a)(3) of the Clean Air Act (the Act), 42 U.S.C. § 7413(a)(3). EPA finds that Imperial Zinc is violating the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Nonferrous Metals Processing Area Sources (Subpart TTTTTT) at the facility located at 1031 East 103rd Street, Chicago, Illinois 60628 (Facility). The relevant statutory and regulatory background, factual background, finding of violations, and environmental impact of these violations are set forth in detail below.

Relevant Statutory and Regulatory Background

National Emission Standards for Hazardous Air Pollutants

- 1. Section 112 of the Act, 42 U.S.C. § 7412, requires the EPA to promulgate a list of all categories and subcategories of new and existing "major sources" and "area sources" of hazardous air pollutants (HAP), and establish emissions standards for the categories and subcategories. These emission standards are known as NESHAPs. The EPA codified these standards at 40 C.F.R. Parts 61 and 63.
- 2. 40 C.F.R. Part 63. Subpart A. contains the general provisions for the NESHAPs.
- 3. "Major source" is defined as "any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants." 42 U.S.C. § 7412(a)(1).
- 4. "Area source" is defined as "any stationary source of hazardous air pollutants that is not a major source." 42 U.S.C. § 7412(a)(2).

- 5. "Stationary source" is defined as "any building, structure, facility, or installation, which emits or may emit any air pollutant." 42 U.S.C. § 7411(a)(3).
- 6. "Hazardous air pollutant" is defined as "any air pollutant listed in or pursuant to" Section 112(b) of the Act. 42 U.S.C. § 7412(a)(6).
- 7. Section 112(i)(3) of the Act, 42 U.S.C. § 7412(i)(3), prohibits any person subject to a NESHAP from operating a source in violation of a NESHAP after its effective date. See also 40 C.F.R. §§ 61.05 and 63.4.
- 8. Pursuant to Section 112 of the Act, the EPA promulgated the NESHAP for Secondary Nonferrous Metals Processing Area Sources 40 C.F.R. Part 63, Subpart TTTTTT, 40 C.F.R. §§ 63.11462 63.11474, on December 26, 2007. 72 Fed. Reg. 73207.

The NESHAP for Secondary Nonferrous Metal Processing Area Sources

- 9. The NESHAP at 40 C.F.R. Part 63, Subpart TTTTTT, applies to the owner or operator of a secondary nonferrous metals processing facility that is an area source of HAP emissions. 40 C.F.R. § 63.11462(a).
- 10. 40 C.F.R. § 63.11463(a) provides that this subpart applies to any existing or new affected source located at a secondary nonferrous metals processing facility.
- 11. 40 C.F.R. § 63.11463(b) provides that the affected source includes all furnace melting operations located at any secondary nonferrous metals processing facilities.
- 12. 40 C.F.R. § 63.11472 defines "furnace melting operation" as the collection of processes used to charge post-consumer nonferrous scrap material to a furnace, melt the material, and transfer the molten material to a forming medium.
- 13. 40 C.F.R. § 63.11472 defines "secondary nonferrous metals processing facility" as a brass and bronze ingot making, secondary magnesium processing, or secondary zinc processing plant that uses furnace melting operations to melt post-consumer nonferrous metal scrap to make products including bars, ingots, blocks, or metal powders.
- 14. 40 C.F.R. § 63.11463(d) provides that an affected source is new if the owner/operator commenced construction or reconstruction of the affected source after September 20, 2007.
- 15. 40 C.F.R. § 63.11464(b)(2) provides that the compliance date for a new affected source started after December 26, 2007, is upon initial startup.
- 16. 40 C.F.R. § 63.11465(b) requires the owner/operator to route the emissions from each new affected source through a fabric filter or baghouse that achieves a particulate matter (PM) control efficiency of at least 99.5 percent or an outlet PM concentration limit of 0.023 g/dscm (0.010 gr/dscf).

17. 40 C.F.R. § 63.11466(c)(1)(v) states that you must use Method 5 or 17 (Appendix A-3 to 40 C.F.R. Part 60) to determine the concentration of particulate matter (front half filterable catch only).

Relevant Factual Background

- 18. Imperial Zinc owns and operates the Facility located at 1031 East 103rd Street, Chicago, Illinois 60628.
- 19. Imperial Zinc owns and operates a secondary zinc processing plant that uses furnace melting operations to melt post-consumer nonferrous metal scrap to make ingots and blocks.
- 20. Imperial Zinc operates four pot furnaces (Pot Furnaces #1 4) and two rotary furnaces (Rotary East and Rotary West) that process secondary zinc at the Facility. Emissions from these furnaces are routed to a baghouse.
- 21. Furnaces #1 4, Rotary East and Rotary West, and the associated baghouse were constructed in 2010.
- 22. On March 11, 2014, EPA conducted an inspection at the Facility. On June 19, 2014, EPA returned to the Facility to observe performance testing.
- 23. On June 19, 2014, Stack Test Group, Inc. conducted a PM performance test on Pot Furnaces #1 4 and Rotary East and Rotary West at the Facility and prepared an emission test report (June 2014 Performance Test Report).
- 24. The June 2014 Performance Test Report shows an average emission rate for PM (filterable) of 0.0200 gr/dscf and a control efficiency of 92.3 %.

Control Efficiency =
$$100 * (1 - \frac{outlet\ concentration}{inlet\ concentration})$$

 $92.3\% = 100 * (1 - \frac{0.0200}{0.2582})$

25. EPA inspectors observed uncaptured emissions at Pot Furnaces #1 – 4 and Rotary East during the performance testing.

Finding of Violations

- 26. PM emissions from the baghouse controlling emissions from Pot Furnaces #1 4 and Rotary East and Rotary West failed to achieve either the 0.010 gr/dscf concentration limit or a PM control efficiency of at least 99.5 percent during the June 2014 Performance Test, in violation of the emission standards at 40 C.F.R.§ 63.11465(b).
- 27. Imperial Zinc failed to route emissions from melting operations at Pot Furnaces #1-4 and Rotary East through a baghouse, as demonstrated by visible emissions escaping

hoods during the June 2014 Performance Test, in violation of the emission standards at 40 C.F.R. § 63.11465(b).

Environmental Impact of Violations

- 28. These violations have caused excess emissions of PM. Particulate matter, especially fine particulates contains microscopic solids or liquid droplets, which can get deep into the lungs and cause serious health problems. Particulate matter exposure contributes to irritation of the airways, coughing, and difficulty breathing, decreased lung function, aggravated asthma, chronic bronchitis, irregular heartbeat, nonfatal heart attacks; and premature death in people with heart or lung disease.
- 29. Imperial Zinc's violations of the above-referenced NESHAP likely resulted in increased emissions of HAPs, including, but not limited to lead. Violation of the above-referenced NESHAP may cause serious health effects. In children, low levels of lead in the blood can result in permanent damage to the brain and nervous system, leading to behavior and learning problems, lower IQ, hearing problems, slowed growth, and anemia. In adults, lead has nervous system effects, cardiovascular effects, and causes decreased kidney function. HAP emissions may also cause harmful environmental and ecological effects.

Date

S/7/14

George T. Czerniak

Director

Air and Radiation Division

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Finding of Violation, No. EPA-5-14-IL-21, by Certified Mail, Return Receipt Requested, to:-

David Kozin President Imperial Zinc Corp. 1031 East 103rd Street Chicago, Illinois 60628

I also certify that I sent copies of the Finding of Violation by first-class mail to:

Eric Jones, Manager Compliance Unit Bureau of Air Illinois Environmental Protection Agency P.O. Box 19506 Springfield, Illinois 62794

On the 7 day of Hug 2014.

CERTIFIED MAIL RECEIPT NUMBER: 1011 1150 0000 2639 3168